



ADDRESS ONLY THE DIRECTOR,
FISH AND WILDLIFE SERVICE

United States Department of the Interior

FISH AND WILDLIFE SERVICE
WASHINGTON, D.C. 20240

TAKE
PRIDE IN
AMERICA

In Reply Refer To:
FWS/RD-Region 8

AUG 04 1988

Memorandum

To: Regional Director, Region 2
From: Regional Director, Region 8
Subject: Taxonomic Assessment of Arizona Pronghorns

Mamalian taxonomists at the National Ecology Research Center have provided the following information on the subject, in response to your inquiry:

1. The number of existing museum specimens (skins and/or skulls) of the Sonoran pronghorn (Antilocapra americana sonoriensis) is 11, of varying ages and both sexes. This number is inadequate to allow a definitive assessment as to whether or not the Sonoran pronghorn is a valid subspecies. Given the generally poor representation of pronghorns in scientific collections, there also may be a scarcity of comparative material of other subspecies.
2. The preferred sample size of skins and skulls for determinations on the validity of a subspecies would be 30 adult animals of one sex from a relatively small geographic area for each group (population or subspecies, in this case three subspecies) being compared. We are not aware of the existence of this many documented specimens.
3. If resolution of this or related questions is desired and if it is impossible to collect and prepare additional museum specimens, there is the possibility that electrophore ic and mitochondrial DNA analyses might shed additional light on the taxonomic status of A. a. sonoriensis and its relationship to other presumed subspecies of pronghorn. This would require tissues from fewer than 30 animals per group.
4. I understand that when the original subspecies determinations were made, one to four skulls were utilized. If so, that number, in my judgment, was inadequate, and in today's environment such work would not be accepted.

5. With available skull samples, taxonomists assigned to Region 8 cannot determine whether the Sonoran pronghorn antelope is a valid subspecies.

Please let me know if you need additional information.

/s/ Richard W. Smith

cc: NERC ORS EHC-Knapp
Directorate Reading File
DD Chron
Region 8 Reading File
DRD Chron

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FISH AND WILDLIFE SERVICE
NATIONAL ECOLOGY CENTER



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Fort Collins, Colorado 80526-2899

In Reply Refer To:
FWS/Region 8/NERC

ESS: 402

July 18, 1988

Memorandum

To: Regional Director, Region 8
From: Acting Director, National Ecology Research Center
Subject: Pronghorn Taxonomy Response for Director Spear

Attached is our proposed response for your signature. If Director Spear supports the Center's proposed involvement, and if Mexico is currently working on the Sonoran pronghorn, then we could provide assistance and pay for the extra genetic analyses at Cornell for \$12,000. If Mexico is not currently capturing any Sonoran pronghorn, then the cost of capturing pronghorn and collecting blood and tissue samples would add another \$15,000-\$25,000 to the project.

If you have any questions, please call.

Attachment

Susan Hazelton